Sales gains for air and fluid filters in the US will be fueled by further strength in manufacturing activity and construction expenditures, as well as by rising consumer concern with domestic indoor air quality and tap water purity. In addition, continued trends toward the incorporation of “smart” features and complementary monitoring devices indicating filter replacement time and toward specialized, industry-specific filtration media will support per unit value gains.

Air washer & cartridge air filters to boast fastest gains

Of the two primary product segments, fluid filters held over three-fifths of demand in 2015. Nevertheless, among product types the fastest market gains through 2020 will be seen in air washer and cartridge air filters, buoyed by accelerating production of air pollution control equipment. Advances in sales of air washer filters will be fueled by environmental regulations regarding sulfur dioxide and mercury emissions and the anticipated acceleration in electric power utility construction which will use state-of-the-art filters to comply with EPA standards. Continued growth in demand for consumer air cleaners that incorporate cartridge HEPA filters will boost value gains for cartridge air filters, as will the development of market-specific filtration systems.

Public utilities market dominant

Public utilities comprise the single largest market for air and fluid filters, holding just over one-third of demand in 2015. Utilities will also post one of the fastest gains of any key market through 2020, supported by greater pollution control equipment spending and greater municipal water use. Continued strength in manufacturing output will buoy filter sales to industrial markets. Stricter air and water regulations, such as standards governing the disposal of effluent from hydraulic fracturing activity, will fuel sales growth in both the utilities and industrial markets. Consumers are concerned about the quality of both residential indoor air and municipal water supplies. In particular, the latter is stimulating demand for higher-value filters capable of removing heavy metals and biological contaminants. Gains in residential construction expenditures will promote sales of whole-house air cleaning systems and point-of-entry water filtration systems.

Imports growing more rapidly than domestic production

Shipment growth in US air and fluid filters will be driven by many of the same factors that drive demand, since most filters used in the US are made domestically. However, imports will rise faster than domestic production, aided by climbing demand for less expensive products fabricated in countries with lower manufacturing costs. Many US filter suppliers have also set up production facilities abroad to target emerging markets, limiting growth in US exports.

Study coverage

This study examines the US air and fluid filter industry. It provides historical demand data (2005, 2010, 2015) plus forecasts (2020 and 2025) by filtration technology (conventional filtration, filtration media, competitive technologies), product and market (utilities, consumer, industrial, other). The study also considers key market environment factors, details company market share and profiles 32 competitors in the US industry.
Air & Fluid Filters
Industry Study with Forecasts for 2020 & 2025

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Filtration Technology

Nonwoven Fabrics -- Nonwoven fabrics are used in a variety of filters, including high efficiency air filters, and water filters. Advances in ongoing nonwoven fabric innovations, all in the context of high-value product differentiation through technological improvements, Gains are also powered by new opportunities for nonwoven air filters. For instance, new filters will continue to be developed as a result of changes in air quality regulations that influence the need for air pollution filters on electric power plants. Although there continue to be opportunities for growth for nonwoven filters used in biotechnology and other healthcare applications, filter manufacturers and system suppliers are often reluctant to adopt newer types of media because of additional involved in testing new materials to levels acceptable to the US Food and Drug Administration.

Growth in demand for nonwoven filter media is also driven by interest in multifunctional filter media. For instance, such nonwoven media can be created in multiple layers and in composite forms, which enable the media to act as a carrier for deodorizing materials such as baking soda or for chemicals that neutralize the acidity of oils and ants during their use.

Similar to paper filters, many nonwoven filters feature pleated media to increase the surface space available for collecting particulates. Although some nonwoven fabrics operate as surface filter media, others are configured to perform as depth media. Creating a nonwoven depth filter involves the use of somewhat more loosely arranged fibers so that the contaminants are caught inside the media instead of on the surface. In some filters, nonwoven fabrics are arranged in layers so that the outer layer is the most porous and the innermost layer has the best efficiency rating. In this way, larger particles are caught toward the outside of the filter.

### Table V-5

<table>
<thead>
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<td>$ filters/household</td>
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<td>Air</td>
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<td>% consumer</td>
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<td>Air &amp; Fluid Filter Demand</td>
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Source: The Freedonia Group

### Table IV-2

<table>
<thead>
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<td>Gross Domestic Product (bil $)</td>
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<td>$ filters/mil $ GDP</td>
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<td>Fluid Filter Demand</td>
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<td>Consumer Water</td>
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<td>Fluid Power</td>
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<td>Other Fluid</td>
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<td>- net imports</td>
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<tr>
<td>Fluid Filter Shipments</td>
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<td>% fluid filters</td>
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<td>Air &amp; Fluid Filter Shipments</td>
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Source: The Freedonia Group

This study can help you:

- Determine your market & sales potential
- Learn more about industry competitors
- Assess new products & technologies
- Identify firms to merge with or acquire
- Complement your research & planning
- Gather data for presentations
- Confirm your own internal data
- Make better business decisions

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- Using input/output ratios, flow charts & other economic methods to quantify data
- Employing in-house analysts who meet stringent quality standards
- Interviewing key industry participants, experts & end users
- Researching a proprietary database that includes trade publications, government reports & corporate literature

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- Construction & Building Products
- Consumer Goods
- Energy & Petroleum
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- Healthcare & Life Sciences
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- Packaging
- Plastics & Other Polymers
- Security
- Services
- Textiles & Nonwovens
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